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Office of the Fire Marshal

1999 Annual Report

Northwest Territories Municipal and Community Affairs

Minister's Message

I am pleased to present the Fire Marshal's Report for the 1999 calendar year. This report highlights the activities of the Office of the Fire Marshal (OFM) and reports the Northwest Territories' record of fire losses, deaths and injuries for the year.

The NWT fire service has experienced continued success with its Territorial Strategy for Community Fire Protection, circulated in February 1998. This publication continues to guide the Department's efforts to improve the fire protection system and public safety education programs throughout the NWT.

A major part of this strategy was the implementation of a comprehensive fire training program in 1999. As the first step in this initiative, eighteen members of the NWT fire service began a three year fire officer training program and will be accredited as fire service instructor/evaluators at the courses' completion. This program will give officers the experience and knowledge to establish an effective training program that will ensure a well trained and efficient fire service in the NWT for many years to come.

In addition, the knowledge learned on this course will help develop and expand the NWT's public safety education program. This program is a major part of the NWT fire service's efforts to prevent fires throughout the Northwest Territories through public awareness training of fire related hazards.

The efforts of the NWT fire service, NWT Fire Chiefs' Association and the Office of the Fire Marshal are greatly appreciated. I am pleased at the progress made in the past year and look forward to continuing success in the years to come.

Hon. Jim Antoine

Office of the Fire Marshal 1999 Annual Report

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Message from the Fire Marshal

This *Annual Report* provides an overview of the Northwest Territories' fire loss record for 1999. This is the first fire loss and activity report of the Office of the Fire Marshal (OFM) since division of the Northwest Territories on April 1, 1999 created the new territory of Nunavut. Comparative data for the post-Division NWT will be reflected in fire loss reports issued for future years.

I am pleased to report that the NWT experienced no fire-related deaths in 1999. Three Yellowknife fire fighters did suffer minor injuries during suppression of a difficult residential fire. The fact that the injuries occurred in a residential setting illustrates that fire fighters must always be on guard, regardless of circumstances. Changing fire conditions and the related hazards associated with fighting any fire always create risk. However, accidents can happen at the scene of any fire and having appropriate equipment and proper training will reduce the potential for injury.

The OFM, in partnership with the NWT Fire Chiefs' Association (NWTFCA), initiated a comprehensive fire training program in 1999. This fire fighter and fire officer training program is being implemented through a contract with the Alberta Fire Training School.

Eighteen (18) members of the NWT fire service have completed the first year of the program. After completing the entire training program in two or three years, these individuals will be accredited as fire service instructor/evaluators. These instructor/evaluators will be key to the NWT strategy to develop the capacity of community fire departments to respond to fires. Instructor/evaluators have already initiated community based training as part of their professional development. This training initiative is based upon a "train the trainer" concept and will result in all NWT fire service training meeting international fire training standards. In 1999, three hundred and six (306) fire fighters received training under this initiative. Fire officer training will be delivered primarily through the annual NWTFCA's training conference.

Public awareness of fire related hazards continues to be the focus of the NWT's public safety education program. In 1999, 1216 members of the general public received this type of awareness training through the OFM. Public education training will continue to be delivered by existing staff, members of community fire departments and through school programs with the cooperation of the Department of Education, Culture and Employment. Community events and Fire Prevention Week continue to be used as an opportunity to raise the awareness of fire safety and hazard abatement.

Technical reviews of development plans were conducted on 177 projects in 1999. After accounting for the creation of Nunavut, this number represents an increase in development activity for the reporting period. Increased resource development activity should lead to an increase in development review activity. The OFM is continuing to develop a streamlined process for the submission and review of development plans. In addition, the OFM is actively involved in the development of a national system of codes and standards. This system of objective-based codes will lead to regulations that are more responsive to regional issues related to the diversity of development.

Statistical review of the fire loss record for 1999 confirms that arson, juvenile fire setting and child fire play continue to be the cause of the majority of fires in the NWT. Most of those fires involve residential settings. Often, where child fire play is involved, children have ready access to smoking material, matches and lighters and start fires out of curiosity. All too often, there is little adult supervision of children immediately prior to the fire starting. The OFM will continue to commit to fire safety education programs in an attempt to reduce the incidence of child fire play.

I must recognize the continuing contribution of all members of the NWT fire service for their selfless efforts to improve the local capacity to prevent and suppress fires. Additionally, the NWTFCA makes representations to community and senior government officials to support enhanced community fire protection and training. It is clear that community and territorial government leaders want to improve the level of fire protection across the north. The OFM's *Comprehensive Strategy for Community Fire Protection* creates the vision for enhancing the overall fire protection system.

D.E. (Don) Gillis
Fire Marshal

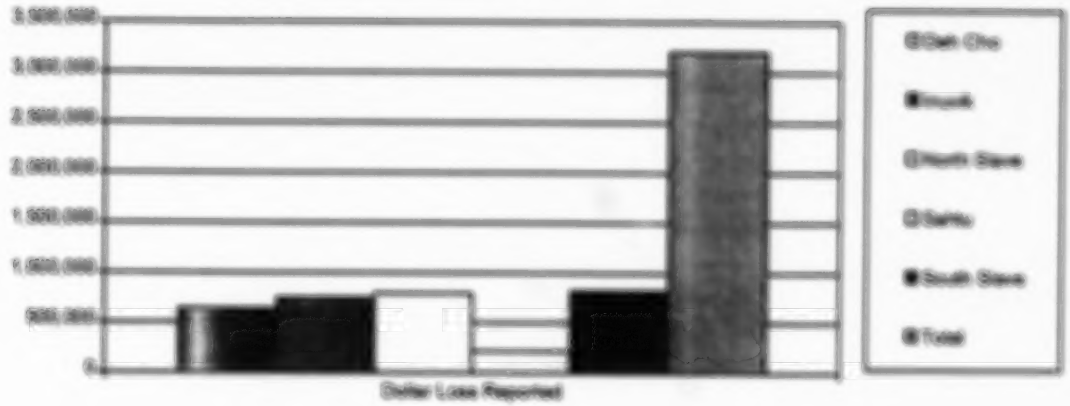
Northwest Territories Fire Statistics — 1999	
Population: *	41,606
Number of Fires Reported:	97
Dollar Loss:	$3,206,808
Deaths:	0
Injuries:	3
Death Rate per 100,000 Population:	N/A
Dollar Loss per Capita:	$77.08
*Source: Bureau of Statistics, Government of Northwest Territories – July 1999	

Assistant Fire Marshal Regional Fire Protection and Prevention Statistics - 1999	
Inuvik Region	
Community Visits	12
Building Inspections	159
Fire Fighters Trained	114
Public Trained	122
Technical Consultations *	157
North Slave	
Community Visits	4
Building Inspections	31
Fire Fighters Trained	100
Public Trained	256
Technical Consultations	380
Sahtu	
Community Visits	4
Building Inspections	9
Fire Fighters Trained	20
Public Trained	0
Technical Consultations	54
South Slave/Deh Cho	
Community Visits	32
Building Inspections	72
Fire Fighters Trained	72
Public Trained	838
Technical Consultations	384

* Technical consultations involve advice given to the general public and fire service leaders on fire protection related questions, including building and fire codes. These statistics do not reflect consultations conducted by Headquarters.

Fire Loss by Region - 1999			
Region	Dollar Loss Reported	Injuries	Deaths
Deh Cho	637,540	0	0
Inuvik	744,650	0	0
North Slave	790,333	3	0
Sahtu	215,086	0	0
South Slave	819,199	0	0
Total	$3,206,808	3	0

Fire Loss by Region - 1999

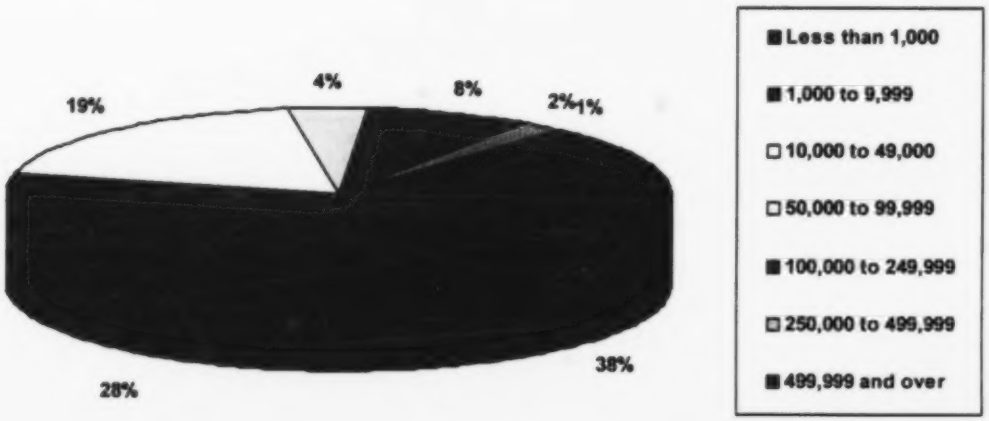


Regional Communities				
Inuvik	Sahtu	Deh Cho	North Slave	South Slave
Aklavik	Colville Lake	Fort Liard	Detah/Ndilo	Enterprise
Fort McPherson	Deline	Fort Providence	Rae-Edzo	Fort Resolution
Holman	Fort Good Hope	Fort Simpson	Rae Lakes	Fort Smith
Inuvik	Norman Wells	Jean Marie River	Wekweti	Hay River
Paulatuk	Tulita	Kakisa	Wha Ti	Hay River Reserve
Sachs Harbour		Nahanni Butte	Yellowknife	Lutsel K'e
Tsiigehtchic		Trout Lake		
Tuktoyaktuk		Wrigley		

Fire Loss Reported by Community - 1999		
Community	**Dollar Loss**	**Number of Fires**
Aklavik	0	0
Colville Lake	0	0
Deline	0	0
Detah/Ndilo	0	0
Enterprise	0	1
Fort Good Hope	45,686	8
Fort Liard	100,000	1
Fort McPherson	0	0
Fort Providence	0	3
Fort Resolution	53,300	3
Fort Simpson	422,540	9
Fort Smith	133,793	3
Hay River	632,106	8
Hay River Reserve	0	0
Holman	636,550	2
Inuvik	108,100	10
Jean Marie River	0	0
Kakisa	0	0
Lutsel K'e	0	0
Nahanni Butte	0	0
Norman Wells	120,000	3
Paulatuk	0	0
Rae-Edzo	65,786	6
Rae Lakes	200	1
Sachs Harbour	0	0
Trout Lake	0	0
Tsiigehtchic	0	0
Tuktoyaktuk	0	0
Tulita	49,400	2
Wekweti	0	0
Wha Ti	0	0
Wrigley	115,000	1
Yellowknife	724,347	36
Total	**$3,206,808**	**97**

Comparison of Value of Fire Loss - 1999		
Range - Dollar Loss	**Number of Fires**	**Percent**
Less than 1,000	37	38
1,000 to 9,999	27	28
10,000 to 49,999	18	19
50,000 to 99,999	4	4
100,000 to 249,999	8	8
250,000 to 499,999	2	2
500,000 and Over	1	1
Total	**97**	**100%**

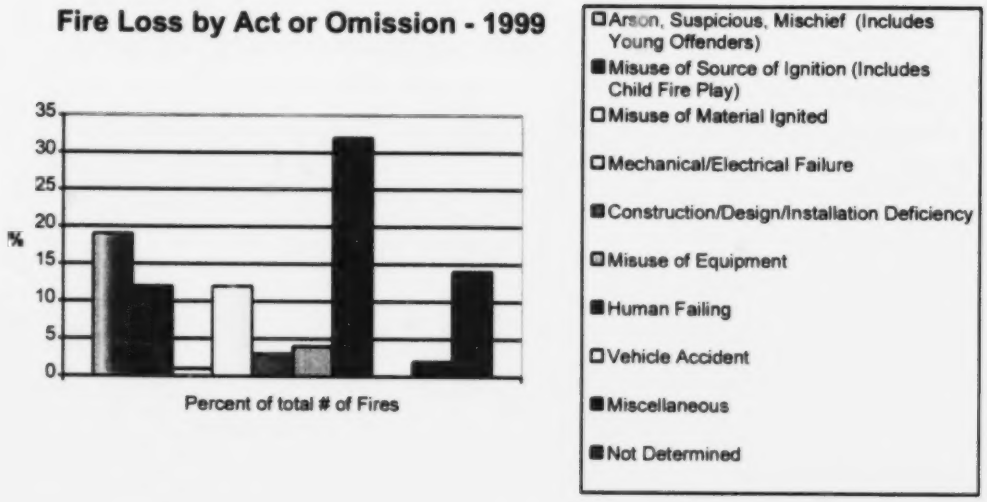
Comparison of Value of Fire Loss - 1999



Fire Loss by Act or Omission – 1999				
	Number of Incidents Reported	Dollar Loss Reported	Percent of Dollar Loss	Percent of Total Number of Fires
Arson, Suspicious, Mischief (Includes Young Offenders)	18	1,600,435	49	19
Misuse of Source of Ignition (Includes Child Fire Play)	12	299,503	9	12
Misuse of Material Ignited	1	❶ 0	0	1
Mechanical/Electrical Failure	12	284,100	9	12
Construction/Design/ Installation Deficiency	3	97,293	3	3
Misuse of Equipment	4	27,750	1	4
Human Failing	31	458,735	14	32
Vehicle Accident	0	0	0	0
Miscellaneous	2	156,214	5	2
Not Determined	14	282,778	10	15
Total	**97**	**$3,206,808**	**100%**	**100%**

❶ Outside area – shed – no damage

See page 17 for definition of terms.



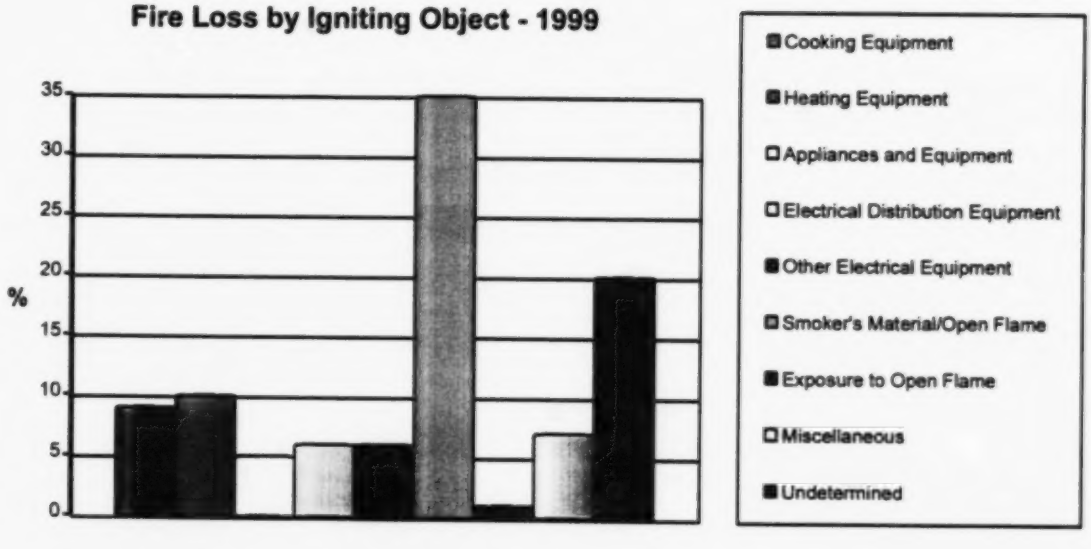
Number of Fires by Act or Omission - 1999	
Arson, Suspicious	**Number of Incidents**
Fort Good Hope	1
Fort Simpson	2
Holman Island	1
Inuvik	2
Norman Wells	1
Yellowknife	3
Total	**10**
Young Offender (12-16 years)	**Number of Incidents**
Fort Good Hope	2
Fort Simpson	2
Inuvik	1
Norman Wells	1
Yellowknife	2
Total	**8**
Child Fire Play (under 12 years)	**Number of Incidents**
Fort Providence	2
Rae-Edzo	2
Yellowknife	1
Total	**5**
Human Failing	**Number of Incidents**
Fort Good Hope	3
Fort Liard	1
Fort Simpson	1
Fort Smith	1
Hay River	4
Inuvik	6
Rae-Edzo	2
Rae Lakes	1
Tulita	1
Yellowknife	11
Total	**31**

Number of Fires by Act or Omission – 1999 (continued)	
Construction/Design/Installation Deficiency	**Number of Incidents**
Fort Simpson	1
Fort Smith	1
Yellowknife	1
Total	**3**
Mechanical or Electrical Failure	**Number of Incidents**
Fort Resolution	1
Fort Simpson	2
Fort Smith	1
Inuvik	1
Wrigley	1
Yellowknife	6
Total	**12**
Miscellaneous	**Number of Incidents**
Fort Providence	1
Yellowknife	1
Total	**2**
Misuse of Equipment	**Number of Incidents**
Fort Good Hope	1
Rae-Edzo	1
Yellowknife	2
Total	**4**
Misuse of Material Ignited	**Number of Incidents**
Fort Simpson	1
Total	**1**
Misuse of Source of Ignition	**Number of Incidents**
Hay River	1
Holman Island	1
Yellowknife	5
Total	**7**

Number of Fires by Act or Omission – 1999 (continued)	
Undetermined	**Number of Incidents**
Enterprise	1
Fort Good Hope	1
Fort Resolution	2
Hay River	2
Norman Wells	1
Rae-Edzo	1
Tulita	1
Yellowknife	5
Total	**14**
Total Number of Fires	**97**

Fire Loss by Igniting Object - 1999				
	Number of Incidents Reported	Dollar Loss Reported	Percent of Dollar Loss	Percent of Total Number of Fires
Cooking Equipment	9	$382,124	12	9
Heating Equipment	10	197,400	7	10
Appliances and Equipment	5	95,250	3	5
Electrical Distribution Equipment	6	119,100	4	6
Other Electrical Equipment	6	141,393	4	6
Smoker Material/Open Flame	34	1,200,218	37	35
Exposure to Open Flame	1	❶ 0	0	1
Miscellaneous	7	456,700	14	8
Undetermined	19	614,623	19	20
Total	**97**	**$3,206,808**	**100%**	**100%**

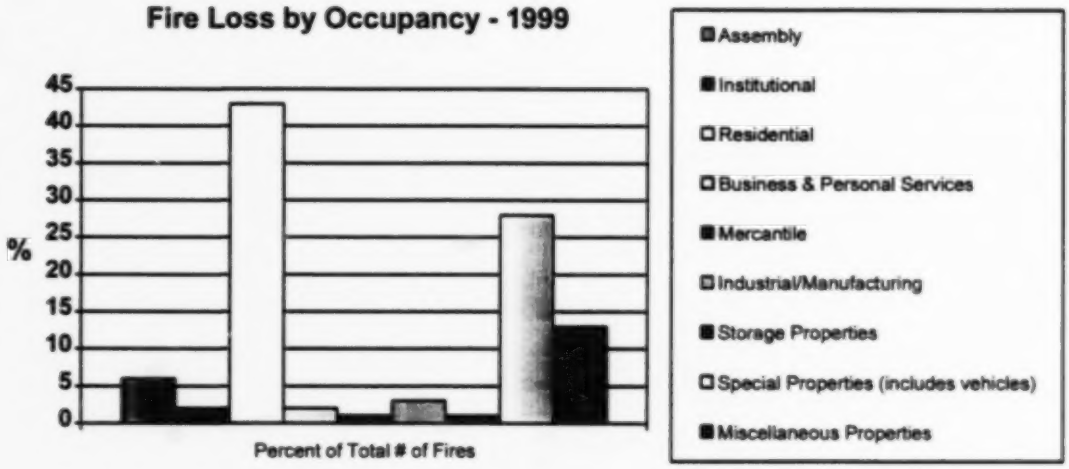
❶ Outside Area - grass and plastic fire – no damage



Fire Loss by Occupancy - 1999				
	Number of Incidents Reported	Dollar Loss Reported	Percent of Dollar Loss	Percent of Total Number of Fires
Assembly	6	266,714	8	6
Institutional	2	32,000	1	2
Residential	42	1,150,738	37	43
Business and Personal Services	2	303,000	9	2
Mercantile	1	90,000	3	1
Industrial/Manufacturing	3	165,000	5	3
Storage Properties	1	400,000	12	1
Special Properties (includes vehicles)	27	776,156	24	28
Miscellaneous Properties	13	23,200	1	14
Total	**97**	**$3,206,808**	**100%**	**100%**

• See page 17 for a definition of terms.

- Fires that occurred in homes accounted for 37 % of the incidents in 1999.
- Residential fires remain a top priority for the Office of the Fire Marshal. The only direct way to reduce fires occurring in homes is through active and complete public fire safety education and prevention programs at the local level. The Office of the Fire Marshal continues to deliver a full range of fire safety programming and support to local Fire Departments for fire prevention initiatives.
- Children playing with fire, occupants who smoke cigarettes and alcohol consumption are major factors in most residential fires in the NWT.



Arson, Suspicious, Mischief Fires - 1999				
Community	**Date**	**Prosecution**	**Conviction**	**Dollar Loss Reported**
Fort Good Hope	May 5			23,000
Fort Good Hope	May 13			❶ 0
Fort Good Hope	September 13	Yes	Yes	2,500
Fort Simpson	January 31			40
Fort Simpson	April 27	Yes	Yes	30,000
Fort Simpson	July 13	Pending		300,000
Fort Simpson	September 14			❷ 0
Hay River	April 15			400,000
Holman	October 16	Pending		616,550
Inuvik	June 3			1,000
Inuvik	September 16			❸ 0
Inuvik	October 30			100,000
Norman Wells	September 6			120,000
Yellowknife	June 4			❹ 0
Yellowknife	June 8			3,345
Yellowknife	October 1			1,000
Yellowknife	October 31			❺ 0
Yellowknife	November 5			3,000
Total Fires = 18				**$1,600,435**

❶ Grass fire
❷ Garbage bin fire
❸ Abandoned chair set on fire
❹ Garbage bin fire
❺ Dumpster fire

Fires Caused by Juvenile Fire Setting – 1999 (Children 12 – 16 years)				
Community	**Date**	**Occupancy**	**Igniting Object**	**Dollar Loss Reported**
Fort Good Hope	May 5	Unclassified	Lighter	23,000
Fort Good Hope	May 13	Outside Area	Smoker's Material	❶ 0
Fort Simpson	January 31	Hotel, Motel, etc.	Smoker's Material	40
Fort Simpson	September 14	Outside Area	Undetermined	❷ 0
Hay River	April 15	Industrial Storage	Unclassified	400,000
Inuvik	September 16	Outside Area	Match	❸ 0
Yellowknife	June 4	Outside Area	Match	❹ 0
Yellowknife	October 1	Unclassified	Match	1,000
Total Fires = 8				**$424,040**

❶ Grass fire
❷ Garbage bin fire
❸ Abandoned chair set on fire
❹ Garbage bin fire

Fires Caused by Child Fire Play - 1999 (Children under 12 years)				
Community	**Date**	**Occupancy**	**Igniting Object**	**Dollar Loss Reported**
Fort Providence	June 14	Outside Area	Exposure to Open Flame	❶ 0
Fort Providence	July 18	Outside Area	Undetermined	❷ 0
Rae-Edzo	January 11	Residential	Lighter	31,500
Rae-Edzo	July 14	Outside Area	Smoker's Material	1,200
Yellowknife	November 2	Residential	Candle	35,000
Total Fires = 5				**$67,700**

❶ Grass and plastic fire
❷ Bush fire

Fire Deaths –1999

Date	Community	Igniting Object/ Act	Men	Women	Child	Fire Fighter	Total
			0	0	0	0	0
Total			**0**	**0**	**0**	**0**	**0**

Fire Injuries –1999

Date	Community	Igniting Object/ Act	Men	Women	Child	Fire Fighter	Total
February 25	Yellowknife	Cooking Equipment/ Human Failing	0	0	0	3	3
Total			**0**	**0**	**0**	**3**	**3**

Definition of Terms	
Occupancy Categories	**Examples**
Assembly	Auditorium, Amusement Park, Stadium, Educational Institution, Church, Funeral Parlor, Recreation Facility, Food or Beverage Establishment
Institutional	Prisons, Detention Centres, Hospitals, Medical Clinics
Residential	Single Family Homes, Duplexes, Trailers, Apartments, Condominiums
Business and Personal Services	Office Buildings
Mercantile	Service Stations, Shopping Centres, Variety Stores, Department Stores
Industrial/Manufacturing	Same
Storage Properties	Grain Elevators, Industrial Storage Facilities, Bulk Storage Tanks
Special Properties	Parks, Reserves, Motor Vehicles, Car Parks, Air Transportation, Mines
Miscellaneous Properties	Building or Structure is Unclassified
Act or Omission Categories	**Examples**
Arson, Suspicious, Mischief	Deliberately Set Fire (by an adult or child 12-16 years old), Suspicious fires
Misuse of Source of Ignition	Smokers' Material, Thawing, Inadequate Control of Open Fire, Child (11 and younger) Playing with Source of Ignition, Welding or Cutting too Close
Misuse of Material Ignited	Fuel Spill, Using Flammable Liquid to Kindle Fire, Improper Storage, Over Heated Cooking Oil, Combustible Placed to Close to Heat
Mechanical/Electrical Failure	Part Failure, Leak, Control Failure, Electrical Short Circuit, Lack of Maintenance
Construction/Design/Installation Deficiency	Installed too Close to Combustible, Suspected Faulty Connections, Over Fusing
Misuse of Equipment	Over Fueling
Human Failing	Asleep, Temporary Loss of Judgement, Physical or Mental Disability, Accident, Suspected Impairment, Ignorance of Hazard
Vehicle Accident	Involving Fire
Miscellaneous	Unclassified Act or Omission